

Remarks:

In the specification, the abstract has been amended to overcome Examiner's objection.

Claims 1, 3, 4, 8-19, and 21-25 remain in this application. Claims 2, 5-7, and 20 have been canceled. Claims 21-25 have been added.

The examiner has acknowledged that claim 20 is directed to allowable subject matter. Claim 17, from which claim 20 depends, has been amended to include all of the elements of claim 20.

Claims 9-13 are objected to. The word "sleeve" has been replaced by the word "combination" as requested by examiner.

Claims 1-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Schroeder (US 4726359).

Amended claim 1 now positively claims the combination of a modular implant and a sleeve engageable with the male and female junction elements of the implant "in frictional relative position maintaining relationship". Schroeder fails to disclose a "modular orthopaedic implant". Thus, claim 1 does not read on Schroeder and is allowable over Schroeder. Furthermore, Schroeder's sleeve is lubricated [3:45] and thus constitutes a teaching away from the claimed "frictional relative position maintaining relationship". See applicant's paragraph [0015].

Claims 2 and 5-7 have been canceled.

Claims 3 and 4 depend from claim 1 and are allowable for the same reasons as claim 1.

Claims 1-3, 5-8, 10 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by White (US 6428578).

Regarding amended claim 1, White fails to disclose "a hollow, resilient sleeve capable of being rolled upon itself into a ring-like configuration". White's sleeve is a rigid metallic

structure formed into a split collet (28) such that separate petals can flex inwardly when they are compressed into a smaller bore. Thus, amended claim 1 does not read on White and is allowable over White.

Claim 2 has been canceled.

Claim 3 depends from claim 1 and is allowable for the same reasons as claim 1. Claim 3 is further allowable over White because White fails to disclose “the inner portion of the sleeve is smaller than the male junction element, the sleeve being stretchable to conform to the male junction element”. Rather, White’s sleeve is larger than the male junction element and a portion of White’s sleeve flexes (i.e. bends) inwardly to contact the element. White’s sleeve is not a resilient sleeve that stretches from a smaller size to conform to the male junction element. Thus, claim 3 further does not read on White and is allowable over White.

Claims 5-7 have been canceled.

Regarding claim 8, White fails to disclose “having a first component with a male junction element having a tapered male portion and a second component with a female junction element having a tapered bore corresponding to the male portion, the male portion and the female portion being engageable in self-locking taper relationship to couple the components together”. White’s first and second components do not taper lock together. Thus, claim 8 does not read on White and is allowable over White.

Claim 8 is further allowable over White because white fails to disclose “a resilient sleeve having an outer portion engageable with the female portion and an inner portion engageable with the male portion, the sleeve being positionable between the male and female portions to space the male and female portions apart to prevent the male and female portions from locking together

and to engage the male and female portions in resilient frictional relative position maintaining relationship”. White’s sleeve is not resilient nor does it space apart self-locking components but instead, his sleeve provides a rigid metallic locking mechanism. Claim 8 thus does not read on White and is allowable over White.

Claims 10 and 14 depend from claim 8 and are allowable for the same reasons as claim 8.

Claims

Claims 1-3, 5-8, 10, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Averill (US 4921500).

Regarding amended claim 1, Averill fails to disclose “a hollow, resilient sleeve capable of being rolled upon itself into a ring-like configuration”. Averill’s adapter (40) is a rigid metallic structure [5:50] used to change a neck taper from a taper angle suitable for taper locking engagement with a metal head to a taper angle suitable for taper locking with a ceramic head. The rigid adapter (40) is tapped into place on the neck with a mallet [4:65-68]. Thus, amended claim 1 does not read on Averill and is allowable over Averill.

Claim 2 has been canceled.

Claim 3 depends from claim 1 and is allowable for the same reasons as claim 1. Claim 3 is further allowable over Averill because Averill fails to disclose “the inner portion of the sleeve is smaller than the male junction element, the sleeve being stretchable to conform to the male junction element”. Rather, Averill’s adapter (40) has “complimentary” shape and dimensions to the male member [4:58-68]. Averill’s adapter (40) is not a resilient sleeve that stretches from a smaller size to conform to the male junction element. Averill’s adapter (40) includes web (54) to

reinforce the adapter (40) and prevent it from stretching. Thus, claim 3 further does not read on Averill and is allowable over Averill.

In addition, since Averill's adapter (40) includes web (54) to reinforce the adapter (40) and prevent it from stretching, Averill constitutes a teaching away from a stretchable sleeve.

Claims 5-7 have been canceled.

Regarding claim 8, Averill fails to disclose "having a first component with a male junction element having a tapered male portion and a second component with a female junction element having a tapered bore corresponding to the male portion, the male portion and the female portion being engageable in self-locking taper relationship to couple the components together". The separate component's between which Averill's adapter (40) is positioned specifically cannot taper lock together. That is the point of Averill's adapter (40) [4:1-18]. The ceramic head taper is incompatible with the stem neck taper, as Averill states, "so that a ceramic femoral head component will not be directly interchangeable with a corresponding metallic femoral head component for securement to a given femoral stem component" [4:19-22]. Thus, claim 8 does not read on Averill and is allowable over Averill. Furthermore, Averill constitutes a teaching away from Applicant's invention since his components are specifically incompatible.

Claim 8 is further allowable over Averill because Averill fails to disclose "a resilient sleeve having an outer portion engageable with the female portion and an inner portion engageable with the male portion, the sleeve being positionable between the male and female portions to space the male and female portions apart to prevent the male and female portions from locking together and to engage the male and female portions in resilient frictional relative position maintaining relationship". Averill's adapter (40) is not resilient nor does it space apart self-locking

components but instead, his adapter provides a rigid metallic locking mechanism to simultaneously taper lock otherwise incompatible components. Averill specifically discloses that “in order to enable securement of the ceramic femoral head component upon the femoral stem component, an adapter (40) is interposed between the inner and outer seating surfaces”. Claim 8 thus does not read on Averill and is allowable over Averill.

Claims 10, 13, 14 and 16 depend from claim 8 and are allowable for the same reasons as claim 8.

Claims 1-3, 5-8, 10, 13, 14 and 16 are rejected under 35 U.S.C. 102(b) as being anticipated by Pratt (US 5080679).

Like Averill, Pratt addresses connecting a femoral head to a stem when the head and stem are made of incompatible materials [1:37-64 and 2:54-59]. Regarding amended claim 1, Pratt fails to disclose “a hollow, resilient sleeve capable of being rolled upon itself into a ring-like configuration”. Pratt’s sleeve (19) is a rigid metallic structure [5:9-23] permanently secured to the head. Thus, amended claim 1 does not read on Pratt and is allowable over Pratt.

Claim 2 has been canceled.

Claim 3 depends from claim 1 and is allowable for the same reasons as claim 1. Claim 3 is further allowable over Pratt because Pratt fails to disclose “the inner portion of the sleeve is smaller than the male junction element, the sleeve being stretchable to conform to the male junction element”. Rather, Pratt’s sleeve (19) has complimentary shape and dimensions to the male member [5:25-29]. Pratt’s sleeve (19) is not a resilient sleeve that stretches from a smaller size to conform to the male junction element. Pratt’s sleeve (19) is a rigid metallic member

permanently mounted within a hard, rigid head that further prevents the sleeve (19) from stretching. Thus, claim 3 further does not read on Pratt and is allowable over Pratt.

In addition, since Pratt's sleeve (19) is a rigid metallic member and is permanently mounted within a hard, rigid head that further prevents the sleeve (19) from stretching, Pratt constitutes a teaching away from a stretchable sleeve.

Claims 5-7 have been canceled.

Regarding claim 8, Pratt fails to disclose "having a first component with a male junction element having a tapered male portion and a second component with a female junction element having a tapered bore corresponding to the male portion, the male portion and the female portion being engageable in self-locking taper relationship to couple the components together". As with Averill, the separate component's between which Pratt's sleeve (19) is positioned specifically cannot taper lock together. Note that Pratt's head includes a cylindrical hole that is incompatible with the tapered neck. Thus, claim 8 does not read on Pratt and is allowable over Pratt.

Furthermore, Pratt constitutes a teaching away from Applicant's invention since his components are specifically incompatible.

Claim 8 is further allowable over Pratt because Pratt fails to disclose "a resilient sleeve having an outer portion engageable with the female portion and an inner portion engageable with the male portion, the sleeve being positionable between the male and female portions to space the male and female portions apart to prevent the male and female portions from locking together and to engage the male and female portions in resilient frictional relative position maintaining relationship". Pratt's sleeve (19) is not resilient nor does it space apart self-locking components but instead, his sleeve provides a rigid metallic locking mechanism permanently mounted in the

head component to provide a taper lock for otherwise incompatible components. Thus, claim 8 does not read on Pratt and is allowable over Pratt.

Claims 10, 13, 14 and 16 depend from claim 8 and are allowable for the same reasons as claim 8.

Claims 1-3, 5-11, 14, 16, 17 and 18 are rejected under 35 U.S.C. 102(b) as being anticipated by Fallin (US 5108452).

Fallin addresses connecting a femoral head to a stem with varying neck lengths. Regarding amended claim 1, Fallin fails to disclose “a hollow, resilient sleeve capable of being rolled upon itself into a ring-like configuration”. Fallin’s extension member (45) is a rigid structure that is hammered onto the femoral neck to extend the neck length and support a femoral head at a new spacing from the stem [7:50-66]. Thus, amended claim 1 does not read on Fallin and is allowable over Fallin.

Claim 2 has been canceled.

Claim 3 depends from claim 1 and is allowable for the same reasons as claim 1. Claim 3 is further allowable over Fallin because Fallin fails to disclose “the inner portion of the sleeve is smaller than the male junction element, the sleeve being stretchable to conform to the male junction element”. Rather, Fallin’s extension member (45) has a complimentary shape and dimensions to the male member [5:25-29]. Fallin’s extension member (45) is not a resilient sleeve that stretches from a smaller size to conform to the male junction element. Fallin’s extension member (45) is a rigid metallic member that is hammered onto the neck in taper locking engagement. Thus, claim 3 further does not read on Fallin and is allowable over Fallin.

In addition, since Fallin's extension member (45) is a rigid metallic member taper locked to the stem and providing a rigid neck extension, Fallin constitutes a teaching away from a stretchable sleeve.

Claims 5-7 have been canceled.

Regarding claim 8, Fallin fails to disclose "a resilient sleeve having an outer portion engageable with the female portion and an inner portion engageable with the male portion, the sleeve being positionable between the male and female portions to space the male and female portions apart to prevent the male and female portions from locking together and to engage the male and female portions in resilient frictional relative position maintaining relationship". Fallin's extension member (45) is not resilient. Furthermore, his extension member (45) forms a rigid metallic taper lock between the components. Thus, claim 8 does not read on Fallin and is allowable over Fallin.

Claims 9-11, 14, and 16 depend from claim 8 and are allowable for the same reasons as claim 8.

Claim 17 has been rewritten to include all of steps of claim 20 which has been indicated as being allowable by Examiner.

Claim 18 depends from claim 17 and is allowable for the same reasons as claim 17.

Claims 17-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Stocks (US 6432141).

Claim 17 has been amended to include all of the steps of claim 20 which has been indicated as being allowable by Examiner.

Claims 18-19 depend from claim 17 and are allowable for the same reasons as claim 17.

Claim 12 is rejected under 35 U.S.C. 103 (a) as being unpatentable over Pratt (US 5080679) in view of McLean (US 2002/0116068).

Claim 12 depends from claim 8 and is allowable for the same reasons as claim 8. Furthermore, McLean describes in paragraph [0053] only embodiments in which the liner is made of a polymer. The taper locking components are described as being either metal or ceramic.

Claim 15 is rejected under 35 U.S.C. 103 (a) as being unpatentable over White (US 6428578) in view of McLean (US 2002/0116068).

Claim 15 depends from claim 14 and is allowable for the same reasons as claim 14.

New claim 21 claims a method like original claim 17 and with the further junction elements of amended claim 8 and the additional step of “positioning the sleeve between the first and second components to space the male and female portions apart to prevent the male and female portions from locking together, the sleeve engaging the male and female portions in resilient, frictional, relative position maintaining relationship”. New claim 8 is allowable over the references for the same reasons as claim 8.

New claim 22 depends from new claim 21 and is allowable for the same reasons as claim 21.

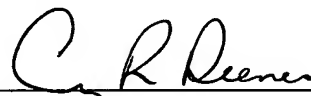
New claim 23 depends from amended claim 8 and is allowable for the same reasons as claim 8. New claim 23 more particularly claims “wherein the sleeve has a first end and a second end, both ends being open.”

New claim 24 depends from claim 1 and more particularly claims “wherein at least one of the first and second components of the modular orthopaedic implant is a provisional implant component.” New claim 24 is allowable for the same reasons as claim 1.

New claim 25 depends from claim 17 and more particularly claims "wherein at least one of the first and second components of the modular orthopaedic implant is a provisional implant component." New claim 25 is allowable for the same reasons as claim 17.

Applicant believes that the claims remaining in this case are in condition for allowance and respectfully requests that a timely Notice of Allowance be issued in this case. Applicant requests a telephone interview with Examiner to discuss the rejections of the independent claims. Examiner is further encouraged to contact Applicant by telephone with any questions about the content of this amendment or to discuss allowable subject matter to facilitate placing this case in condition for allowance.

Respectfully submitted,

By: 
Cary R. Reeves
Registration No. 35,334
P.O. Box 1268
Aledo, TX 76008
817-594-5994